



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/666,227 | 09/18/2003 | Colleen Poerner | 2002P15657US01 | 8462 |

7590

11/06/2006

Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

TERMANINI, SAMIR

ART UNIT

PAPER NUMBER

2178

DATE MAILED: 11/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/666,227

Applicant(s)

POERNER ET AL.

Examiner

Samir Termanini

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/18/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Background

1. This Office Action is responsive to the following communications: Applicant's amendment filed on 10/6/2006.

2. Claims 1-34 are pending. The Applicant has amended claims 1, 7, 33, and 34 (on 10/6/2006). Amended claims: 1, 33, and 34 are in independent form.

3. The Examiner's rejection of claim 7, made under 35 U.S.C. §101 in paragraphs 8 and 9 of the previous Office Action (dated 7/6/2006) is withdrawn in view of the amendment.

4. Applicant has amended the specification in response to the objection cited by the Examiner in paragraphs 1 and 2 of the previous Office Action (dated 4/7/2006) with regard to minor typographical errors concerning the filing date of applications to which priority is claimed (60/413,010 and 60/412,917). Applicant's amendment is in compliance with CFR 1.78, and therefore, in view of the amendment, this objection is withdrawn.

5. The Examiner's objection to the capitalization of trademarks in the application has been withdrawn.

6. The Examiner's objection to the Abstract and Drawings in the application has been withdrawn.

7. The second paragraph of the REMARKS section of Applicant's amendment states, *inter alia*, "...the drawings have been amended...." However, the amendment fails to amend the drawings.

8. The Examiner's rejection of claims 1-34, made under 35 U.S.C. §102 in paragraphs 14 and 15 of the previous Office Action (dated 7/6/2006) are withdrawn because applicant's amendment necessitated new grounds of rejection.

Claim Rejections - 35 U.S.C. § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-12 and 14-34 are rejected under 35 U.S.C. 102(b) as being anticipated by *SIMATIC Process Control System PCS 7 WinCC Basic Process Control*, 2000 (hereinafter "*PCS7*").

As to independent claim 1, *PCS7* teaches a method for configuring HMI user screen navigation ("project navigation window" pp. 2-2, line 3) comprising the activities of: providing an HMI screen navigation editor to a user ("Following Editors/Wizards will be available to you..." pp. 2-2, line 3); via the HMI screen navigation editor ("Picture Tree Manager" pp. 2-2, 2nd row in table), enabling the user to create a collection comprising a linked hierarchically organized plurality of HMI screen nodes ("The Picture Tree Manager is used to manage a hierarchy of systems, sub-systems, function names, and Graphics Designer pictures." pp. 2-2, 2nd row in table); responsive to a detected collision between a parent node of said linked hierarchically organized plurality of HMI screen nodes and another node ("If you insert a new container in an existing node..." pp. 5-16, Note at bottom of page), automatically adjusting a position of said parent node ("the hierarchy expands by

Art Unit: 2178

one level" pp. 5-16, *see* note at bottom of page); and rendering the collection to the user ("Displayed in the upper left part of the hierarchy window is the hierarchy of the systems, subsystems and pictures as a tree." pp. 5-9, under Data Window).

As to dependent claim 2, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: receiving from the user a specification of an HMI root screen node ("The hierarchy window contains a root node that contains the name of the project." pp. 5-15, under Creating a Hierarchy).

As to dependent claim 3, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: receiving from the user a specification of an HMI child screen node ("Create...by means of drag&drop...pop-up menu...menu bar..." pp. 5-15, under creating a Hierarchy), the HMI child screen node a descendent of an HMI root screen node ("...a root node..." pp. 5-12, under Creating a Hierarchy).

As to dependent claim 4, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: receiving from the user, a specification of a relationship between two of the plurality of HMI screen nodes (e.g. via the 'Insert After', 'Insert Before' or 'Insert Into Node' menu commands." pp. 5-18, under Pop-Up Menu).

As to dependent claim 5, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: receiving from the user a specification of an organization of the collection (e.g. "The hierarchy can be changed by moving individual nodes or entire parts of the hierarchy. This can be performed within a level or the levels may be changed." pp. 5-17, under Changing the Hierarchy).

As to dependent claim 6, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: receiving from the user a specification of a hierarchy of the collection

("You can create the hierarchy in the following ways: - Create the hierarchy by means of drag&drop

- Create the hierarchy via the pop-up menu -Create the hierarchy via the menu bar -Create the hierarchy - change the container name", pp. 5-15, under Creating a Hierarchy).

As to dependent claim 7, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: automatically ("Automatically", pp. 5-7, under view menu) determining an arrangement of the collection (e.g. "Arrange Picture Icons Automatically" pp. 5-7, under view menu)(emphasis added).

As to dependent claim 8, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: receiving from the user a specification of a size the plurality of HMI screen nodes ("View' 'Large Symbols" pp. 5-8 under Standard Toolbar; *see also* "Picture properties, [permitting the user to] change [the] size of a selected picture...", pp. 5-10, last bulleted item).

As to dependent claim 9, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: zooming a rendition of the plurality of HMI screen nodes ("If the preview window is resized, the displayed picture will adapt to the new dimensions." pp. 5-7, under Preview)

As to dependent claim 10, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: panning a rendition of the plurality of HMI screen nodes (see the scroll bar, in fig. 5.1.3 on pp. 5-9).

As to dependent claim 11, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: collapsing a rendition of the plurality of HMI screen nodes (see collapsing minus sign e.g. to the left of e577d6.MCP in fig. 5.1.3 on pp. 5-9).

As to dependent claim 12, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: expanding a rendition of the plurality of HMI screen nodes (e.g. "(+) icon" pp. 5-13, under 5.2.3; *see also* e.g. "...hierarchy level is expanded...", pp. 5-5, under Copy).

As to dependent claim 14, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: rendering a portion of a plurality of HMI screen nodes (*See* fig. 5.3 on pp. 5-14, where only a portion of the screen nodes are displayed).

As to dependent claim 15, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: enabling the user to revise the collection ("The hierarchy can be changed by moving...entire parts of the hierarchy." pp. 5-17, under Changing the Hierarchy).

As to dependent claim 16, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: enabling the user to revise at least one of the plurality of HMI screen nodes ("The hierarchy can be changed by moving individual nodes..." pp. 5-17, under Changing the Hierarchy).

As to dependent claim 17, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: receiving a user specification of an attribute of an HMI screen node ("Picture properties, such as change date and size of a selected picture, can be displayed." pp. 5-10, under 5.2).

As to dependent claim 18, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: receiving a user specification of an attribute of the collection ("Group Value' attribute of the group display." pp. 6-5, under Connecting a Group Display to a Picture).

As to dependent claim 19, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: receiving from a user a specification of a link between two HMI screen nodes ("You can carry out the following activities with the Picture Tree Manager:...create a relationship between the pictures created in Graphics Designer" pp. 2-4, under 2.2).

As to dependent claim 20, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: receiving from a user a specification of a link from a first HMI screen node to a second HMI screen node ("Cut and paste a picture from the selection window or move it using drag-and-drop to insert a picture into a container in the hierarchy." pp. 5-10, under 5.2), the second HMI screen node non-familial to the first HMI screen node (*See* fig. 5.1.3 where the unassigned containers and pictures are in the selection window, pp. 5-9, fig. 5.1.3).

As to dependent claim 21, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: rendering a link between two HMI screen nodes (*See* fig. 5.1.3 where the picture preview contains a rendering of a link between two screen nodes).

As to dependent claim 22, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: rendering a link from a first HMI screen node to a second HMI screen node ("Pictures that you remove from the hierarchy...are inserted in the selection window automatically." pp. 5-10, under 5.2, 2nd to last bullet), the second HMI screen node non-familial to the first HMI screen node (*See* fig. 5.1.3 where the unassigned containers and pictures are in the selection window, pp. 5-9, fig. 5.1.3).

As to dependent claim 23, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: receiving from a user a specification of a navigation control comprising

Art Unit: 2178

at least one HMI screen link ("...assignment of pictures to the system and creates an order between the pictures that are created in Graphics Designer." pp. 5-1, under 5, 3rd bullet).

As to dependent claim 24, *PCS7* further teaches the limitations of claim 1, addressed above, further comprising: rendering a navigation control comprising at least one HMI screen link ("In Runtime, picture selection by means of navigation through the hierarchy tree..." pp. 5-1, under 5, 4th Bullet).

As to dependent claim 25, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: receiving from a user a specification of a navigation control comprising at least one button ("for example, buttons with a picture selection of '@CONFIG.PDL.'" pp. 7-11, under 7.4 - Visualizing Monitoring in Runtime).

As to dependent claim 26, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: rendering a navigation control comprising at least one button ("the picture selection for the plant picture is already available for a button in the set of key commands." pp. 7-11, under 7.4 - Visualizing Monitoring in Runtime).

As to dependent claim 27, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: receiving from a user a specification of a navigation control comprising at least one button (e.g. '@CONFIG.PDL.'" pp. 7-11, under 7.4 - Visualizing Monitoring in Runtime), the at least one button comprising an HMI screen link ("the picture selection for the plant picture is already available for a button in the set of key commands." pp. 7-11, under 7.4 - Visualizing Monitoring in Runtime).

As to dependent claim 28, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: rendering a navigation control comprising at least one button ("buttons" pp. 7-11, under 7.4 - Visualizing Monitoring in Runtime), the at least one button comprising

an HMI screen link ("used to access the WinCC pictures of the current project...of all connected monitors" pp. 3-7, 1st & 2nd paragraphs).

As to dependent claim 29, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: receiving from a user a specification of a navigation control comprising at least one button (e.g. '@CONFIG.PDL.'" pp. 7-11, under 7.4 - Visualizing Monitoring in Runtime), the at least one button comprising an HMI screen link ("used to access the WinCC pictures of the current project...of all connected monitors" pp. 3-7, 1st & 2nd paragraphs), the at least one button activatable via a user-specified soft key (e.g. "via user-defined buttons." pp. 9-2, under Accessing the "Storage" User Interface in WinCC Runtime).

As to dependent claim 30, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: rendering a navigation control comprising at least one button (see fig. 3-7 on the middle of pp. 3-7), the at least one button comprising an HMI screen link ("used to access the WinCC pictures of the current project...of all connected monitors" pp. 3-7, 1st & 2nd paragraphs), the at least one button activatable via a user-specified soft key (e.g. "via user-defined buttons." pp. 9-2, under Accessing the "Storage" User Interface in WinCC Runtime).

As to dependent claim 31, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: receiving from a user a specification of a navigation control (e.g. '@CONFIG.PDL.'" pp. 7-11, under 7.4 - Visualizing Monitoring in Runtime) comprising at least one element activatable via a user-specified soft key (e.g. "via user-defined buttons." pp. 9-2, under Accessing the "Storage" User Interface in WinCC Runtime).

As to dependent claim 32, *PCS7* teaches the limitations of claim 1, addressed above, further comprising: rendering a navigation control (e.g. "buttons with a picture selection of

Art Unit: 2178

'@CONFIG.PDL.'" pp. 7-11, under 7.4 - Visualizing Monitoring in Runtime) comprising at least one element activatable via a user-specified soft key (e.g. "via user-defined buttons." pp. 9-2, under Accessing the "Storage" User Interface in WinCC Runtime).

As to independent claim 33, the only difference between claim 1 and this claim, is that the former claims the same process that defines the product of latter. *PCS7* teaches a machine-readable medium containing instructions ("on the product CD-ROM" pp. 9-30, last sentence) for causing a machine to carry out the method of claim 1. Therefore, this claim is rejected for the same reasons set forth in treatment of claim 1.

As to independent claim 34, the only difference between claim 1 and this claim, is that the former claims the same process that defines the machine of latter. *PCS7* teaches a machine (e.g. "multi-client" or "Server" pp. 1-2, bottom of page; *see also* fig. 1.1 on 1-2) for a machine taught to be capable of carrying out the method of claim 1. Therefore, this claim is rejected for the same reasons set forth in treatment of claim 1.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over *PCS7* in view of *Spriggs et al.* (US Pat. No. 6,421,571).

As to dependent claim 13, *PCS7* teaches the limitations previously discussed with respect to claim 1 above. *PCS7* does not teach rotating a rendition of a plurality of HMI

Art Unit: 2178

screen nodes. *Spriggs et al.* is cited for teaching rotating a rendition of a plurality of HMI screen nodes ("objects in the instrument view 174 are preferably capable of being rotated" col. 17, lines 5-10). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have rotated the rendition of a plurality of HMI screen nodes as taught by *Spriggs et al.* with the method for configuring HMI user screen navigation taught by *PCS7* because *Spriggs et al.*: (1) is directed to the same problem of viewing, editing and navigating (col. 16, line 60 to col. 17 line 10) a hierarchical instrument tree view (col. 16, line 48); (2) is in the same field of endeavor of industrial plant asset management systems (col. 1, lines 5-10); and (3) expressly suggests that being able to rotate the rendition increases the value of the view to the user ("...thereby providing value to the user view..." col. , lines 8-10).

Response to Arguments

13. Applicant's arguments, see pp. 9, lines 4-10, filed 10/6/2006, with respect to conventional elements in the Drawings have been fully considered and are persuasive. The Objection to the drawings has been withdrawn.

In response to Section I of Applicant's REMARKS, the first sentence of 37 CFR 1.84(a) states, *inter alia*, that "The drawing must show every feature of the invention specified in the claims." The second sentence of 37 CFR 1.84(a) provides the exception with regard to conventional features disclosed in the specification and claims.

Applicant's response to the drawing objection with respect to elements 1110, 1120, 1130, 1140, 1150, 1160, 1170, 6200, 6220, 6222, 6240, 6226, 6228, and 6100 arguing "the present Office Action presents no evidence that the elements alleged as not shown in 'structural detail' are 'essential from a proper understanding of the disclosed invention,'" is

immaterial under 37 CFR 1.83(a) in all cases except those where features of the invention specified in the claims are conventional.

Therefore, Applicant's position with regard to the objection, can only be either of: (1) that the aforementioned elements are not features of the invention specified in the claims ("Applicant respectfully submits that the drawings as originally submitted shows 'every feature of the invention specified in the claims'..., pp.9, lines 4-10); or (2) that the aforementioned elements are both conventional and not essential for a proper understanding of the invention and henceforth need not be illustrated ("...conventional features disclosed in the description and claims, where their detailed illustration is not essential for a proper understanding of the invention", pp. 9, lines 4-10).

The Examiner notes that, the Applicant, having only argued that the "Office Action presents no evidence that the elements alleged as not shown in 'structural detail' are 'essential from a proper understanding of the disclosed invention'" (pp.9, lines 4-10) intended for the elements 1110, 1120, 1130, 1140, 1150, 1160, 1170, 6200, 6220, 6222, 6240, 6226, 6228, and 6100 to be conventional. This inference being reasonable, in view of the fact that the aforementioned elements are clearly features of the invention specified in the claims. For example: Claim 1 features, *inter alia*, a HMI Screen navigation editor (element 1150), and rendering a collection to a user (element 1160); Claim 2, *inter alia*, features receiving a specification from a user described in paragraph 57 of the specification as elements 1150 and 1120; Claim 34, *inter alia*, features a device described in paragraph 40 of the specification as element 1170; Claim 34, *inter alia*, features rendering the collection to a user as described in paragraph 53 to be element 1130; and Claim 30, *inter alia*, features a navigation control button as described in paragraph 70 of the specification to be

Art Unit: 2178

represented by element 6220. Accordingly, under the second sentence of 37 CFR 1.84(a), elements in the drawings that are both conventional and not essential for a proper understanding of the invention are permitted as labeled representations.

14. Applicant's arguments, see pp. 9, lines 23-24, filed 10/6/2006, with respect to the abstract have been fully considered and are persuasive. The Objection to Abstract has been withdrawn.

In response to Section II of Applicant's REMARKS, notwithstanding current patent practice guidelines for abstracts detailed under MPEP § 608.01(b), 37 CFR 1.72(b) states, *inter alia*, "The purpose of the abstract is to enable the United States Patent and Trademark Office and the public generally to determine quickly from a cursory inspection the nature and gist of the technical disclosure." Additionally, Applicant is correct in that there is no requirement under 37 CFR 1.72(b) for the Applicant to be helpful to the USPTO and the public by avoiding the use of implied phrases.

15. In response to Section III of Applicant's REMARKS, Applicant's arguments, see pp. 10, lines 5-12, filed 10/6/2006, with respect to trademark usage have been fully considered and are persuasive. The Objection concerning trademark usage has been withdrawn.

16. Applicant's arguments, see pp. 10 lines 22-23, filed 10/6/2006, directed to the Rejections under U.S.C. § 101 have been fully considered but are moot in view of the amendment.

In response to Section IV of Applicant's REMARKS, a portion of the Applicant's argument improperly suggests that a rejection was made of record under both 35 U.S.C. §101 and MPEP §2105. The Applicant is reminded that 'Statutory Subject Matter'

rejections are not made under sections of the MPEP, as it does not have the force of law or the force of the rules in Title 37 of the Code of Federal Regulations (*See* MPEP Rev. 5, Aug 2006, Foreword).

17. In response to Sections V and VI of Applicant's REMARKS, Applicant's arguments with respect to claims 1-34 have been considered but are moot in view of the new grounds of rejection.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

19. Although not relied upon, the following prior art made of record is considered pertinent to Applicant's disclosure:

- [1] *Ryan et al.* (US 6477435 B1) for teaching a development tool for control programs for industrial controllers develops an area model detailing equipment and phases of operation of the equipment of a controlled process.

Art Unit: 2178

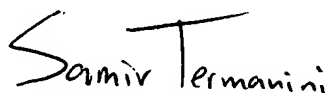
- [2] *Havner et al.* (US 6854111 B1) for teaching visualization program fragments sharing the same control variables in library files.
- [3] *Elsbree et al.* (US 7017116 B2) for teaching a software development toolkit automates and eases the task of generating graphical human-machine interfaces that are interactive control modules or software necessary to control a process.

20. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samir Termanini whose telephone number is (571) 270-1047. The Examiner can normally be reached from 9 A.M. to 4 P.M., Monday through Friday (excluding alternating Fridays).

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 2178

A handwritten signature in black ink, appearing to read "Samir Termanini". The signature is stylized with a large, looped 'S' and a distinct 'T'.

Samir Termanini
Patent Examiner
Art Unit 2178

A handwritten signature in black ink, appearing to read "Stephen Hong". The signature is stylized with a large, looped 'S' and a distinct 'H'.

STEPHEN HONG
SUPERVISORY PATENT EXAMINER